TITLE: Twinkling Light String

BACKGROUND OF THE INVENTION

A conventional twinkling light string includes a main wire connecting with several branch strings, wherein each branch string is provided several bulb assemblies. Every bulb assembly connected on a first string has the same structure, which is different from the bulb assembly on a nearby second string. Hence, the twinkling light string can effectively twinkle in use.

In order to obtain the above purpose, a known structure, such as U.S. Patent number 6,474,841, provides two kinds of bulb assemblies for use. It includes a standard bulb assembly and a non-standard bulb assembly being larger than the standard bulb for connecting with different branch strings in interval. When assembling the two kinds of bulb assemblies, it will be very trouble in differentiating them.

Accordingly, the present invention is to provide a twinkling light string, which is provided with two kinds of improved bulb assemblies while the bulb assemblies can be differentiated easily and assembled.

BRIEF DESCRIPTION OF THE DRAWINGS

The following drawings indicate the character and improvement of the present invention.

Figure 1 is an exploded perspective view of a first bulb assembly according to the present invention.

Figure 2 shows an assembled perspective view of Figure 1.

Figure 3 is an exploded perspective view of a second bulb assembly according to the present invention.

Figure 4 shows an assembled perspective view of Figure 5.

Figure 5 is a schematic view of a twinkling light string according to the present invention.

DETAILED DESCRIPTION OF THE INVENTION

Referring firstly to figure 1 and 2, it discloses a first bulb assembly (10) according to the present invention, which includes a socket (1), a bulb holder (2), and a bulb (3). The holder (2) is provided with a groove (21) at both sides relating to the direction where the conductive wire (31) of the bulb (3) is folded. At a perpendicular side relating to the groove (21) of the holder (2) is formed a plane portion (22). In the socket (1) relating to the position of the groove (21) of the holder (2), a convex portion (11) is provided. A plane (12) is formed in the socket (1) relating to the plane portion (22) of the holder (2). Hence, the holder (2) can and only can be connected with the socket (1) effectively. An outside convex beam (13) is capable of being formed for easily differentiating.

Referring to figure 3 and 4, it discloses a second bulb assembly (10') according to the present invention, which includes a socket (1'), a bulb holder (2'), and a bulb (3). The holder (2') is provided with a groove (21') at both sides perpendicular to the direction where the conductive wire (31) of the bulb (3) is folded. At one side relating to the direction of the conductive wire (31) of the bulb (3) being folded, a plane portion (22) is provided. In the socket (1') relating to the positions of the grooves (21') of the holder (2'), the convex portions (11') are provided. A plane

(12') is formed in the socket (1') relating to the plane portion (22') of the holder (2'). Hence, the holder (2') can and only can be connected with the socket (1') effectively.

From above description, it can be found that the bulb holder (2) of the first bulb assembly (10) can and only can connect with the socket (1) of the first bulb assembly (10) and cannot be inserted into the socket (1') of the second bulb assembly (10'). On the other hand, the bulb holder (2') of the second bulb assembly (10') can and only can connect with the socket (1') of the second bulb assembly (10') and cannot be inserted into the socket (1) of the first bulb assembly (10). Hence, the assembling of the two kinds of bulb assemblies will never be mistaken. Further, the assembled bulb assembly can be easily differentiated based on the convex beam (13) only formed on the first bulb assembly (10).

In application, as shown in Figure 5, the twinkling light string includes a main wire (4) and several branch string. The first branch string can be provided with the first bulb assemblies (10) while the second branch string can be provided with the second bulb assemblies (10'), etc. So the twinkling light string according to the present invention obtains the predicted objective while the use of the designed two bulb assemblies.

Accordingly, the present invention obtains utility for use and should be allowed for patent.